

MUS. COMP. ZOOLOG.

LIBRARY

FEB 23 1965

A SMALL COLLECTION OF BIRDS FROM THE ISLAND OF
BUAD, PHILIPPINES

KENNETH C. PARKES

Curator of Birds

Carnegie Museum

HARVARD
UNIVERSITY

In his chapter on the history of ornithology in the Philippine Islands, Hachisuka (1931: 48) made the following statement:

"The Fleming collection in Toronto has some six hundred and twenty-five skins from the Philippines. These were collected between 18th April 1909 and 21st November 1910, by J. J. Mounsey, an engineer. It appears that the places visited by him were Mindoro, Luzon, Samar, Leyte, Cebu and Mindanao. The skins were not well prepared, but they carry full scientific data on labels."

In discussing the history of bird collecting on the island of Leyte, Rabor (1938: 15) referred to the same collection, supposed to contain birds from Leyte, and mentioned that no list of these had been published. Neither Hachisuka nor Rabor examined any of the specimens from this collection.

As I have been engaged in compiling a complete list of the birds of Leyte, it was necessary for me to learn more about these specimens, and to see them if possible. The Fleming collection is now in the Royal Ontario Museum in Toronto, and Mr. L. L. Snyder of that institution was good enough to send me a list, taken from the catalogue, of the specimens alleged to be from Leyte. The locality on the collector's original labels is given merely as "Zamarraga" or "Zumarraga," to which, on the Fleming collection labels, is added "—Buad de Leyte." I can find no locality on the island of Leyte, in any available map or gazeteer, named "Zamarraga," "Zumarraga," or "Buad." However, there is an *island* named Buad, of which the principal town is Zumarraga, and I have no doubt that this locality is the actual source of the Mounsey specimens. Mr. Snyder was kind enough not only to send me these specimens on loan, but to permit me to publish this list of the collection, as it appears that there are no other records from Buad in the literature of Philippine birds.

Submitted for publication March 20, 1963
Issued February 10, 1965

I have been unable to determine the significance of the usage "Buad de Leyte" on the labels of the Mounsey birds, as Buad is geographically a part of Samar rather than of Leyte. According to the "Pronouncing Gazetteer and Geographical Dictionary of the Philippine Islands" (Bur. Insular Affairs, U. S. War Dept., 1902: 380), the island of Buad is seven by four miles in size, with a central peak rising to 1,155 feet. It lies at the entrance to Maqueda Bay, about six miles south of the town of Catbalogan, midway along the west coast of Samar. The birds collected by Mounsey in 1910 suggest that the habitat was lowland-foothill forest.

Rand and Rabor (1960: 364) stated that only two collections of birds were made on Samar between 1900 and 1957, one in 1924 for the Philippine Bureau of Science and one in 1952 for its successor, the Philippine National Museum. Hachisuka, however, as quoted above, listed Samar among the islands visited by Mounsey, and this could not refer to the Buad collection, as the latter was thought to have come from Leyte. In any case, Buad is geographically and faunally part of Samar, and Buad records may be considered, for all intents and purposes, Samar records. Details of earlier Samar expeditions may be found in Rand and Rabor (1960) as well as in Hachisuka (1931). Reference may be made below to Steere, to Bourns and Worcester, and to Whitehead; these refer to the three major Nineteenth Century Samar collections as listed by Rand and Rabor (1960).

As mentioned above, I am indebted to Mr. L. L. Snyder of the Royal Ontario Museum for permission to report on this collection. Most of the study was carried on at the American Museum of Natural History, New York, in connection with my work on Leyte birds, supported by a grant from the Frank M. Chapman Memorial Fund. Carnegie Museum specimens were used as comparative material, as were certain specimens from the Chicago Natural History Museum and the Peabody Museum of Natural History, Yale University, through the courtesy of Austin L. Rand and S. Dillon Ripley, respectively.

The Buad collection consists of 38 specimens, of which I have examined all but three (these are noted in the text, below). They were collected by Mounsey between June 15 and 23, 1910, and were purchased by J. H. Fleming from the dealer W. F. H. Rosenberg in London in 1912. For each specimen, the Fleming collection number, Mounsey's original number in parentheses, date, and sex are given. For some species there are remarks on taxonomy, distribution, and molt; terminology of molts and plumages is that of Humphrey and Parkes (1959). An explanation is given for any scientific names used which differ from

MUS. COMP. ZOOLOGICAL
LIBRARY
FEB 23 1965
HARVARD
UNIVERSITY

those used in the well known handbook by Delacour and Mayr (1946).

Butorides striatus carcinophilus Oberholser. Little Mangrove Heron. 24418 (425) ♂ June 19; 24419 (426) ♀ June 19; 24420 (446) ♂ June 22.

These specimens belong to the small resident race, which, according to Rand and Rabor (1960: 373) has been collected on Samar only by Steere and by Bourns and Worcester. In the Samar material studied by Rand and Rabor only the large migrant race, *B. s. amurensis*, was represented.

Ptilinopus leclancheri leclancheri (Bonaparte). Black-chinned Fruit Dove. 22216 (438) ♀ June 21.

This species appears to be quite uniform in the Philippines; in fact, specimens in the American Museum of Natural History do not uphold the supposed Palawan race *P. l. gironieri*.

Ducula aenea aenea (Linnaeus). Green Imperial Pigeon. 22228 (436) ♂ June 21.

Stresemann (1952: 520) has shown that the type locality of *Columba aenea* Linnaeus should properly be Manila, so the name *chalybura* Bonaparte, used by Delacour and Mayr (1946) and others for the Luzon race, becomes a synonym of *aenea*. The population formerly known as *D. a. aenea* takes the name *D. a. polia* (Oberholser).

The name *D. a. glaucocauda* Manuel has had a rather checkered career. It was originally proposed (Manuel, 1936: 410-412) for the birds of Samar, Biliran, and Mindanao, on the basis of their having the upper surface of rectrices, primaries and secondaries "appearing as if covered with a fine gray powder." Mayr (1944: 147) attributed this variation in wing and tail color to "wear and staining with grease." Delacour (*in* Delacour and Mayr, 1945: 107) rejected *glaucocauda*, stating that the character used by Manuel was unreliable as it depended entirely upon the freshness of the skin. Delacour's statement (erroneously attributed to Mayr) was disputed by Salomonsen (1952: 344), who revived the name *glaucocauda* on the basis of his examination of recently-collected material in the Philippine National Museum consisting of 6 Samar and 2 Mindanao specimens, compared with 3 from Polillo, 2 from Mindoro, and 4 from Negros. In addition to the "bloom" on the

flight feathers described by Manuel, Salomonsen characterized "*glaucocauda*" as smaller than the other Philippine races; his wing measurements for "*glaucocauda*" were 227-245 mm. versus 228-256 mm. for "*chalybura*" [= *aenea*].

Salomonsen's findings, in turn, were not accepted by de Schauensee (1957: 5-6), who compared 3 specimens from Sorsogon, southern Luzon, with 8 from Mindanao. He could find no difference in color of wings and tail between the two series, and stated that measurements of his specimens showed "just the opposite to that which was found by both Manuel and Salomonsen." Manuel, however, had not invoked size as a character of "*glaucocauda*," and the figures given by de Schauensee as "Manuel's measurements for Mindanao birds" are actually those of Salomonsen's *total* series (Mindanao + Samar). Manuel gave only the measurements of his type specimen (wing 234 mm.), although he did give tables of measurements for the races "*chalybura*," *fugaensis*, and *palawanensis*. His figures for "*chalybura*" (wing 232-250 mm.) plus the measurements given by de Schauensee (Luzon, 222-235 mm.; Mindanao, 233-252 mm.), Rand and Rabor (1960: 329, 381) for Bohol (234-245 mm.) and Samar (220-241 mm.), and Ripley and Rabor (1958: 31) for Mindoro (233-249 mm.) all indicate that there is no important difference in size among the populations of these islands. Ripley and Rabor, although not specifically mentioning "*glaucocauda*," rejected it by implication in stating that their Mindoro specimens were "similar to specimens from Mindanao and Negros."

Finally, Rand and Rabor (1960: 381) revive "*glaucocauda*," pointing out that Samar and Bohol specimens show the greatest development of the bloom on the flight feathers. Of the four Mindanao specimens they mention, they considered two to "approach *D. a. aenea*."

The excellent series of this species now in the American Museum of Natural History, substantially larger than that available to any previous author, shows that the geographic separation is not so clearly defined as suggested by Rand and Rabor. The bloom on flight feathers is rather consistently present in specimens from Samar and Leyte, less so in specimens from Mindanao, as they state. A number of specimens from southern Luzon, however, also show this character, probably accounting for de Schauensee's failure to find a difference between Sorsogon and Mindanao specimens in this respect. The bloom itself is of external origin, or develops only with full growth of the feather. This is amply demonstrated by such specimens as AMNH 610984 (Davao, Mindanao, June 20, 1889), 610985 (Davao, April 30, 1889), and 768199 (Balin-

sasayao, Leyte, July 8, 1961), all of which have partly grown incoming primary feathers which conspicuously *lack* the bloom. Although there may be geographic variation in some genetic factor controlling, for example, friability of feather barbules, I doubt that such a character should be used to distinguish a taxonomic unit until a genetic basis can be established. The American Museum series of the non-Philippine races, notably the populations of the Lesser Sunda Islands, shows that there is inconsistency in the presence or absence of this bloom in some populations, and that it is also absent on incoming feathers in these populations. The name *glauco-cauda* Manuel is therefore here considered a synonym of *aenea*.

Chalcophaps indica indica (Linnaeus). Green-winged Ground Dove.
22249 (407) ♂ June 16; 22250 (no Mounsey number) ♀ June 18.

The Philippine population of this widely distributed species is generally listed under the nominate race, for which the correct type locality, according to Stresemann (1952: 511), is Amboina Island in the Moluccas. Peters (1937: 114) credited this race with an extensive range from peninsular India to the western Papuan islands, but admitted in a footnote that this treatment was tentative because of insufficient material. Ripley (1961: 167) used the name *indica* for the population of India and East Pakistan, and Ripley and Rabor (1958: 33-34) used the name for Philippine birds, although they pointed out that there is much variation, apparently correlated with geography, in the color of females (much less so of males) within the range currently assigned to *C. i. indica*. Hachisuka (1939: 46-47) used the name *Columba pileata* Scopoli (type locality Panay) for the Philippine population, but he considered the mainland birds to be typical *indica*, and specifically stated that he had made no comparisons with birds from (among other places) Amboina. I have, in fact, seen no comparisons made, in print, between Amboina specimens and those from the Philippines on the one hand and from India on the other. As mentioned above, geographic variation in this species is best expressed in females. I have seen only males from Amboina, and cannot separate these from Philippine specimens. The latter are therefore provisionally identified as *C. i. indica* (Linnaeus), and another name will probably have to be found for the Indian birds.

Cacatua haematuropygia (Müller). Philippine Cockatoo. 22383 (419)
♀ June 17; 22387 (420) ♀ June 17.

The large series of this species in the American Museum of Natural History confirms the conclusion of Rand and Rabor (1960: 420) that no separation of subspecies on the basis of size is possible. Even some of the slight geographic variation in measurements noted by these authors appears to have been a function of the small size of their samples. This relative uniformity throughout the Philippines contrasts sharply with the polytypy of the other Philippine parrots, suggesting the possibility that *Cacatua* may be a relatively recent and highly successful colonizer of the archipelago.

Both of the Buad specimens are very worn and dirty, with the complete (presumably prebasic) molt well under way.

Loriculus philippensis worcesteri Steere. Philippine Hanging Parakeet.
22407 (442) ♀ June 22.

The specimen is an adult female, with *all* of its rectrices and upper tail coverts, as well as a few adjacent rump feathers, just beginning to emerge from their sheaths. No molt is apparent on the wings nor elsewhere on the body. Of the 49 specimens of this species in the Carnegie Museum collection, only three illustrate tail molt, and of these, two are also molting in other tracts. The third specimen, a male of the subspecies *L. p. panayensis*, is just completing its first prebasic molt, with some sheathed rectrices the *last* feathers to appear. There is nothing in any of these specimens to suggest a drastic molt in the caudal region, and the Buad bird was almost certainly replacing accidentally lost feathers.

Ninox philippensis philippensis Bonaparte. Philippine Boobook Owl.
22174 (409) ♀ June 16.

This species is credited to the island of Samar by Delacour and Mayr (1946: 118), but is not listed among the birds of Samar by Rand and Rabor (1960). McGregor (1909) does not record it as having been collected on Samar. The only Samar record of this owl I have been able to find in the literature is a mention by Ogilvie-Grant (1897: 210) that *Ninox philippensis* was among the species in Whitehead's first collection from Samar, which was totally destroyed in a fire aboard ship (see Ogilvie-Grant, 1896: 458). The Buad bird thus appears to be the only extant Samar specimen of *Ninox philippensis*. It is, unfortunately, a very poor skin; as far as can be determined, it does not differ from specimens of the nominate race from Luzon (to which the type locality of *philippensis* was restricted by Mayr, in Delacour and Mayr, 1945: 108).

Pelargopsis capensis smithi (Mearns). Stork-billed Kingfisher. 22432 (412) ♂ June 17; 22433 (413) ♀ June 17; 22434 (424) ♀ June 19.

I have not seen toptotypical specimens from Masbate of this race, but have compared the Buad birds with a series of 3 from Negros, 3 from Polillo, 1 from Leyte, and 2 from Mindanao, and noted no geographic variation. According to Rand and Rabor (1960: 390) this species has not been collected on Samar since Whitehead.

Halcyon smyrnensis gularis (Kuhl). White-throated Kingfisher. 22449 (430) ♀ June 20.

This specimen is exceptionally worn, and had not begun to molt.

Halcyon chloris collaris (Scopoli). White-collared Kingfisher. 22453 (439) ♀ June 21.

This specimen was not examined. According to Rand and Rabor (1960: 391) this common species has been collected on Samar only by Steere and by Bourns and Worcester.

Eurystomus orientalis cyanicollis Vieillot. Dollar Bird. 22489 (450) ♀ June 23.

This specimen was not examined. For the use of the subspecific name *cyanicollis* (not "*cyanocollis*" as spelled by Rand and Rabor, 1960) rather than *orientalis*, see Stresemann (1952: 519).

Buceros hydrocorax semigaleatus Tweeddale. Calao. 22273 (429) ♀ June 19.

This specimen was not examined.

Artamus leucorhynchus leucorhynchus Linnaeus. White-breasted Wood-Swallow. 22636 (427) ♀ June 19.

The specimen is a full-grown juvenile, beginning its first prebasic molt on the underparts. This widely distributed subspecies shows no geographic variation from northern Luzon through Borneo.

Pycnonotus goiavier samarensis Rand and Rabor. Yellow-vented Bulbul. 22601 (416) ♀ June 17; 22602 (443) ♀ June 22.

This recently described subspecies (Rand and Rabor, 1960: 346) is a valid one, but some of the characters claimed for it do not hold. The color of the crown and ear coverts, supposedly darker and more blackish than in nominate *goiavier*, does not differ from the latter when specimens of equal wear and museum age are compared. Freshly molted birds have substantially darker crowns than even slightly worn ones from the same geographic area. The heavier breast streaking and darker flanks of *samarensis*, on the other hand, are immediately apparent when compared with *goiavier* of equal age. This evaluation of the characters of *samarensis* is exactly the opposite of that of de Schauensee and du Pont (1962: 163), who emphasized crown color of Leyte birds (not seen by Rand and Rabor, but assigned by those authors to *samarensis* on the basis of probability) as compared to Luzon birds. They found "the heavier streaking on the breast . . . not apparent." However, I have examined the specimens at the Academy of Natural Sciences of Philadelphia upon which these conclusions were based, and found that the Luzon material was old, faded and discolored. My own comparisons were made using the abundant, recently collected material at Carnegie Museum and the American Museum of Natural History.

The smaller size of *samarensis* is also upheld by specimens I have measured, although the overlap is slightly more than indicated by the series measured by Rand and Rabor (1960: 347). They had only 5 males (wing 86-89 mm.) and 4 females (wing 80.5-87 mm.) from Luzon to compare with their good series of 14 Samar males (wing 77-83.5 mm.) and 10 females (wing 74-78 mm.). Carnegie Museum has 21 measurable topotypical specimens of nominate *goiavier* from the general vicinity of Manila. Of these, 13 males measure wing 83-88 mm., and 8 females wing 77-86 mm. Although a longer series of both races might show a few millimeters more overlap, there is clearly a significant size difference.

The two Buad specimens are both just beginning their first prebasic body molt on the back and breast, the molt being slightly more advanced on the June 22 specimen than on that from June 17. Their wing measurements (73, 75.5) are typical of *samarensis*.

Hypsipetes philippinus saturator (Hartert). Philippine Bulbul. 22583 (405) ♂ June 15; 22584 (411a) sex? June 16; 22585 (411) ♂ June 16; 22586 (414) ♂ June 17.

This is the species formerly known as *Microscelis gularis*; for the change in name, see Rand and Rabor, 1959.

Examination of a large amount of excellent material of this species shows that current concepts of its races need to be somewhat revised. De Schauensee and du Pont (1962: 163-164) have recently shown that *H. ruficularis* on Mindanao is not confined to Zamboanga as stated by Rand and Rabor (1960: 429), but extends at least as far east as Lake Lanao, where it overlaps both *H. philippinus* and *H. everetti* (with each of which it has by some authors been considered conspecific; see Rand and Rabor, 1959: 103), and must thus be considered a separate species. Deignan (1960: 286-287) admitted the subspecies *H. p. saturator* (Hartert), limiting its range to "eastern Mindanao," but as mentioned above, de Schauensee and du Pont have shown that it extends west to Lake Lanao. Rand and Rabor (1960: 428) considered *saturator* a synonym of *philippinus* without specifying the extent of their Luzon (topotypical) material of the latter, while de Schauensee and du Pont (1962: 163), with only two Luzon specimens available, also synonymized *saturator* with *philippinus*.

The chief difficulty in recognizing *saturator* seems to be the concept of it as an endemic race of Mindanao. De Schauensee and du Pont, for instance, appear to have compared Mindanao birds on the one hand with Luzon, Samar and Leyte birds on the other. It is understandable that, using this procedure, they would not consider *saturator* separable. In point of fact, however, the area of greatest differentiation from Luzon birds is not eastern Mindanao but Samar and Leyte. Specimens from these islands average darker overall than those from Luzon, but the best character is the color of the underparts. The Samar/Leyte birds have darker and more extensive pigmentation on the flanks, reducing to a mere trace in some specimens what is a fairly extensive white mid-ventral area in *philippinus*. The streaking of the underparts is also heavier than in Luzon birds. Specimens from eastern Mindanao (topotypes of *saturator*) are closer to Samar/Leyte birds than to Luzon birds in color, so the latter name may be used for this dark population. Cebu specimens are also closest to *saturator*; I have not examined Bohol specimens, which should belong here also. There is some overlap of *saturator* and *philippinus* through individual variation, but enough specimens are readily assignable to one or the other to make it practical, in my opinion, to recognize both races.

It is obvious that Delacour and Mayr (1946: 175) should have compared *saturator* with "*gularis*" (= *philippinus*) rather than with "*guimarensis*" (= *guimarasensis*). Their comparison of the latter two races is also misleading, as *guimarasensis* is not "paler on the throat," but

darker and less brightly rufescent than *philippinus*. They state that *guimarasensis* is "very slightly larger," but the wing measurements of the two races given by Rand and Rabor (1960: 428) show no overlap, and the bill of *guimarasensis* is also conspicuously larger than that of *philippinus*.

The four June specimens from Buad are all badly worn and frayed, and had not yet begun to molt; adults of this subspecies from Leyte in the American Museum of Natural History had not yet begun the pre-basic molt as late as July 10. Adults of *philippinus* from central Luzon in Carnegie Museum were just beginning this molt on dates ranging from July 12 to August 8.

Copsychus saularis mindanensis (Boddaert). Dyal. 24341 (no Mounsey number) ♂ June 22.

According to Rand and Rabor (1960: 399), this species has been collected on Samar only by the Steere expedition.

Macronus striaticeps mindanensis Steere. Brown Tit-Babbler. 22612 (428) ♀ June 19; 22613 (440) ♀ June 21.

This species has recently been reviewed by Rand and Rabor (1960: 429-430), utilizing the material in the Chicago Natural History Museum. Their revision left certain questions open, particularly the status of the two Mindanao races, *mearnsi* and *mindanensis*, and the relationship of Mindanao lowland and Samar birds. They did not examine specimens from Leyte. As it was necessary for me to determine the correct name to use for the Leyte population, I assembled an excellent series composed of the pertinent specimens from the American Museum of Natural History, Peabody Museum of Natural History, and Chicago Natural History Museum. The races *striaticeps* of Basilan and *kettlewelli* of the Sulu Archipelago, the most sharply defined of the subspecies, were examined briefly but did not form a part of this study.

Rand and Rabor (1960: 430) give the range of *M. s. mindanensis* Steere (type locality Ayala, Mindanao) as "western and southern Zamboanga," but comment in their discussion of *M. s. mearnsi* Deignan that "there is a possibility that *mearnsi* is a mountain form only, and that the lowlands are inhabited by a form very close to *cumingi* or *mindanensis*." In addition to one of the two Cotabato specimens described by Rand and Rabor as being close to Samar birds in color, I have examined two specimens from Davao and three from Mailag,

Bukidnon, all from relatively low elevations on Mindanao. These all differ from *mearnsi* in reduced ventral streaking and less ruddy dorsum, and cannot satisfactorily be separated from an excellent series of *mindanensis* from Zamboanga. This confirms the suggestion of Rand and Rabor that *mearnsi* is a highland and *mindanensis* a lowland race in Mindanao. I have examined specimens of *mindanensis* from Matam, Katipunan, Zamboanga, a lowland locality less than 30 miles from the summit of Mount Malindang, a highland area inhabited by *mearnsi*.

For the population of Samar (and, tentatively, Leyte and Dinagat), Rand and Rabor revive the name *cumingi* Hachisuka (misspelled "*cumingi*" by several recent authors). This name was based on a single specimen from the Cuming collection in the British Museum, thought by Hachisuka to have come from Manila. As Rand and Rabor show, however, this locality is erroneous beyond any reasonable doubt; the type specimen matches Samar birds, and they hence substitute Samar for Manila as type locality (for a parallel case involving a Cuming specimen, see Parkes, 1961: 3-4).

I have compared an excellent series of 26 specimens of "*cumingi*" from Samar and Leyte with 12 Mindanao specimens of *mindanensis*, and cannot find a single color difference that is not completely bridged by individual variation in a substantial number of specimens. Rand and Rabor themselves have called attention to the similarity of specimens from Cotabato, Mindanao, to those of Samar. I therefore consider *cumingi* Hachisuka, 1934, a synonym of *mindanensis* Steere, 1890, and refer to the latter the populations of Samar, Leyte, and lowland Mindanao, both eastern and western. Incidentally, de Schauensee and du Pont (1962: 164) are in error in claiming that theirs is the first record of this species from Leyte, as it was collected there by several previous expeditions, including those of Steere and of Whitehead (McGregor, 1909: 535).

Within the Mindanao highland race *mearnsi* there are, as suggested by Rand and Rabor, some tendencies toward geographic variation, as would be expected in view of the insular type of distribution of such a highland form. Topotypes from Mount Apo are the most rufous below, with streaks rather blurred as well as washed with rufous. A series from Mount Katanglad shows heavier, more distinctly contrasting ventral streaking, as well as a darker, less rufescent color. Specimens from Mount Malindang, Zamboanga, although from an area geographically well removed from the other two mountain masses mentioned, are actually somewhat intermediate, as a series, between Apo and Katan-

glad birds. They are more distinctly streaked than Apo specimens, less so than those from Katanglad, and are whiter, less washed with rufous below than are Apo birds. Rand and Rabor mention three specimens from Mount McKinley as exhibiting individual variation. Of these three, which I have examined, one is the coldest (least rufescent), most distinctly streaked specimen of *mearnsi* that I have seen. The other two match closely, surprisingly, not birds from nearby Mount Apo, but a long series from Mount Katanglad. In spite of these obvious tendencies, it does not appear worthwhile to attempt to recognize nomenclatorially more than one highland Mindanao subspecies.

The subspecies *boholensis* Hachisuka, recognized by Rand and Rabor, is not very well differentiated from *mindanensis*. In series, the difference in color of upperparts between *boholensis* and "*cumingi*" described by these authors does not hold good. The subspecies can be maintained, however, on the basis of average whiter, more distinct ventral streaking, paler flanks, and paler under tail coverts.

The two Buad specimens are both worn adult females, just beginning their body molt on the underparts but not yet molting flight feathers.

Rhipidura javanica nigritorquis Vigors. Malaysian Fantail. 24376 (421) ♂ June 17.

Some minor tendencies toward geographically correlated variation can be noted in this species within the Philippines. In color, this is manifested chiefly in the extent of white on the tips of the rectrices, with Palawan birds exhibiting the most white and Negros birds the least. The partially black throat which appears as a color phase or mutation in other subspecies, especially *longicauda*, is apparently absent in the Philippine population. As for size, in general Palawan, Samar and Leyte birds average largest, followed by those from Mindanao and Basilan, while Luzon, Marinduque and Sulu birds are the smallest. There is no clear basis in any of this variation for a subdivision of *nigritorquis*, although relatively few specimens, less than 40 from the entire Philippine archipelago, were examined.

The Buad specimen is very worn, and had apparently not yet begun to molt; it is poorly made, and could not be examined thoroughly. According to Rand and Rabor (1960: 403), this species has been collected on Samar only by Bourns and Worcester.

Cyornis rufigastra philippinensis Sharpe. Mangrove Blue Flycatcher. 24383 (423) "♀" [= ♂] June 18.

Rather than follow Delacour and Mayr (1945: 113) and others in using an exceedingly broad genus *Muscicapa*, I subscribe to the opinion expressed by Rand and Fleming (1957: 173-174) and by van Bemmel (1948: 345, footnote), and follow Vaurie (1953) in subdividing this group. Vaurie used the generic name *Niltava* for this and related species of blue flycatcher (in which he was followed by Rand and Rabor, 1960), but he has told me that after having seen true *Niltava* in life, he changed his opinion and would recognize the *Cyornis* group as a separate valid genus (letter of October 23, 1957).

Within the range now ascribed to the subspecies *philippinensis*, there is a slight amount of geographic variation. A small series from the Sulu Archipelago is somewhat more intensely colored on the breast than other *philippinensis* seen. In dorsal coloration, Negros birds are slightly brighter blue, Mindanao and Basilan birds the duller. One female from Siquijor in the American Museum of Natural History has a much greater extent of rufous on the underparts than any other specimen seen, with white limited to a small patch on the abdomen. However, Dr. Rand informs me (letter of May 21, 1962) that this description does not apply to the series of Siquijor specimens in the Chicago Natural History Museum.

Hypothymis azurea azurea (Boddaert). Black-naped Blue Monarch.
22620 (415) ♂ June 17; 22621 (432) ♀ June 20.

Ripley (1961: 438) has combined the genera *Hypothymis* and *Monarcha*, but, as pointed out by Mayr (1962), erroneously used *Monarcha*, the junior name, for the combined genus. The present species, therefore, will retain the name as given above whether or not one subscribes to Ripley's "lumping" of these two genera.

I fully agree with Mayr (*in* Delacour and Mayr, 1945: 113) that the proposed race *H. a. compiler* Peters cannot be upheld. I do not see even a trend toward the supposed whiter abdomens in southern Philippine versus Luzon specimens. There is much variation among Philippine populations of this species, especially among females, and certain trends or patterns of variation can be detected. Mayr (*loc. cit.*) has already called attention to the possibility that Sulu birds may be separable. Some of the trends I noted among females are as follows: the bluest and most richly colored on head and underparts are six from the Bataan peninsula, Luzon, and one from Mindoro; the grayest, least blue, are those from Basilan, Mindanao and Samar; eight from central

and southern Luzon and one from Panay show the sharpest contrast between the blue of the throat and the gray of the breast. It appears that subdivision of *H. a. azurea* probably could not be accomplished without a highly impractical splintering.

The Buad birds, like so many others in this collection, are exceedingly worn, rather poor specimens.

Nectarinia jugularis jugularis (Linnaeus). Olive-backed Sunbird. 24395 (417) ♂ June 17; 24396 (418) ♀ June 17; 24397 (434) ♂ June 20.

I follow Rand (1951b) in using the name *N. j. jugularis* to cover the highly variable series of populations of this sunbird extending from southern Luzon to Mindanao and Basilan, leaving to a later paper a detailed discussion of my study of this species.

The Buad specimens are all very worn. Both of the males, especially 24395, are near the orange-breasted ("*dinagatensis*") extreme of *jugularis*. Male no. 24397 shows the brown line between the orange breast and metallic throat, described by Rand (1951b: 599) as an individual variation more common and pronounced in birds from the northern islands.

Oriolus chinensis yamamurae Kuroda. Black-naped Oriole. 24325 (408) ♂ June 16; 24326 (441) ♀ June 22.

Since the publication of Delacour and Mayr's book (1946), two authors have critically reviewed the Philippine races of this oriole. Gilliard (1949) recognized five races (two new) in the Philippines proper, but did not discuss Palawan birds. Rand (1951a) admitted only two subspecies of Gilliard's five, plus *palawanensis*. My own study of this species has led me to conclusions differing from those of either of the above authors. It is necessary for me to place my findings on record here to explain my choice of name for the Buad specimens.

As mentioned above, Gilliard did not discuss the validity of *palawanensis* Tweeddale. Rand recognized this race, characterizing it only by "the wide yellow band on the forehead of the male, while the female overlaps in characters with those of the north Philippine populations." Rand lists, in his table of measurements, only a single male from Palawan, with a yellow forehead band of 23 mm., as compared with seven males from the Manila region with forehead bands of 12 to 20 mm. However, a series of nine males from central Luzon in Carnegie Museum, with forehead bands ranging from 14 to 24 mm. wide, completely brack-

ets the series of adult males from Palawan in the American Museum. Rand has already admitted that females of "*palawanensis*" cannot be distinguished from Luzon females, so it is apparent that there is no justification for the recognition of a Palawan race.

On Luzon and the adjacent islands toward the south, there is, in fact, a cline from north to south in the direction of a *reduction* of width of forehead band. Gilliard's proposed subspecies "*sorsogonensis*" from southern Luzon is, as suggested by Rand, merely a point along this cline. This may also be true of *fugaensis* Gilliard, based on a single female from Fuga Island, north of Luzon; I follow Rand in tentatively synonymizing this proposed race with *chinensis* pending examination of additional material from the islands in Luzon Strait.

Rand assigned to *suluensis* Sharpe the populations of "the southern Philippines, north at least to Mindanao." His table of measurements lists only one specimen, a female from Sibutu, from the Sulu Archipelago. Parts of his characterization of *suluensis* do not accord at all with the material I have examined. I find no foundation whatsoever for the statement that *suluensis* is characterized by an "average more greenish back." As for the "more frequent occurrence of green in the tail," not a single fully adult male specimen examined shows any green in the tail, and the "subadult" birds that *do* have green in the tail have no more of it than do comparable Luzon specimens: Females (but not males, *contra* Rand) seem to attain the bright orange definitive plumage less often than do Luzon females; thus, most females have some green in the tail, but so do all Luzon birds in the "green-backed" plumages. Rand states that the female of *suluensis* lacks the yellow tips to the secondaries; actually, these vary individually from present but minute to absent, regardless of sex.

Gilliard admitted *yamamurae* Kuroda for specimens from Mindanao and Basilan, separating it from *suluensis* entirely on the basis of a much shorter tail (♂♂ 100-106 mm. versus 111-118 mm. for *suluensis*). Rand acknowledges this (*op. cit.*: 592), but then (p. 593) proceeds to synonymize *yamamurae* with *suluensis* because Gilliard's wing measurements for *suluensis* were small (148-156.5 mm. versus 153-156.5 for Mindanao/Basilan males), whereas Meinertzhagen (1923) had given measurements indicating that Sulu males had long wings (152, 161-170 mm.). Rand made no further mention of tail length, the only character Gilliard had claimed distinguished *yamamurae* and *suluensis*.

I have examined the same Sulu birds used by Gilliard, and find that the small wing measurements given in his table for these specimens are

highly misleading. In the first place, Gilliard was the victim of a most unfortunate typographical error; his largest Sulu male measures wing 165.5 mm., not 156.5 mm. as printed. The smallest specimen (wing "148" mm.) has the longest primaries broken off on both sides, and should not have been used in the measurements. The third male measures wing 154 mm., and is quite worn. An additional Sulu male in the American Museum, apparently not measured by Gilliard, has a wing of 160 mm. Thus, with three males measuring 154+ (worn), 160, and 165.5 mm., Gilliard's specimens do not differ significantly in size from those measured by Meinertzhagen, and *suluensis* is seen to differ from *yamamurae* both in wing and in tail length.

Although I cannot see all of the clinal tendencies listed by Rand (*op. cit.*: 592), certainly enough are present to make quite difficult a realistic and practical subdivision of this species in the Philippines. I suggest the following arrangement as perhaps the best compromise:

- (1) *Oriolus chinensis chinensis* Linnaeus. Synonyms *?fugaensis* Gilliard, *sorsogonensis* Gilliard, *palawanensis* Tweeddale. Luzon and adjacent islands; Palawan. Although placed as a synonym of *chinensis*, "*sorsogonensis*" of southernmost Luzon, together with the birds of Mindoro and Marinduque, are regarded as intergrades toward the next race.
- (2) *O. c. yamamurae* Kuroda. Yellow forehead band narrower, less yellow on tips of central rectrices and (usually lacking completely) on secondaries. Samar (including Buad), Leyte, Mindanao, Basilan. A male from Tablas resembles *chinensis* in extent of yellow on tips of rectrices, but is otherwise typical of *yamamurae*. I have not critically examined specimens from the row of islands extending southeast from Panay to Bohol, which probably belong here.
- (3) *O. c. suluensis* Sharpe. Similar to *yamamurae*, but wing somewhat and tail decidedly longer; extent of yellow on outer rectrices greater. Sulu Archipelago.

The female from Buad is in heavy body molt. Rand and Rabor (1960: 413) list only Steere as having collected *Oriolus chinensis* on Samar, but the American Museum of Natural History has a specimen collected by Whitehead at Bonga, Samar, June 6, 1896. presumably the one listed by Ogilvie-Grant (1897: 222). This record was also overlooked by McGregor (1909: 695).

Corvus macrorhynchus philippinus Bonaparte. Large-billed Crow.
22382 (406) ♂ June 16.

This species is quite uniform within the Philippines. I have examined specimens from Luzon, Samar, Leyte, Negros, Panay, Mindanao, and Sibutu, and have found no variation correlated with distribution.

SUMMARY

A collection of 38 specimens (23 species), from the Philippine island of Buad, and now in the Royal Ontario Museum, is here listed for the first time. Previous references in the literature have erroneously credited this collection to the island of Leyte. Buad is faunally and geographically part of Samar. Of one species, *Ninox philippensis*, the specimen reported here is the only one from Samar known to be extant. Critical taxonomic studies of the following species are presented: *Ducula aenea*, *Pycnonotus goiavier*, *Hypsipetes philippinus*, *Macronus striaticeps*, and *Oriolus chinensis*. Additional taxonomic remarks and notes on molt and distribution are presented for other species.

REFERENCES CITED

- DEIGNAN, H. G.
1960. Pycnonotidae (Oriental), in Check-list of birds of the world, 9, ed. by E. Mayr and J. C. Greenway, Jr. Cambridge, Mass., Museum of Comparative Zoölogy, 506 pp.
- DELACOUR, J., AND E. MAYR
1945. Notes on the taxonomy of the birds of the Philippines. *Zoologica*, 30: 105-117.
1946. *Birds of the Philippines*. New York, Macmillan, 309 pp.
- DE SCHAUENSEE, R. M.
1957. Notes on Philippine birds. *Notulae Naturae*, no. 303: 12 pp.
- DE SCHAUENSEE, R. M., AND J. E. DU PONT
1962. Birds from the Philippine Islands. *Proc. Acad. Nat. Sci. Philadelphia*, 114: 149-173.
- GILLIARD, E. T.
1949. Two new orioles from the Philippines. *Proc. Biol. Soc. Washington*, 62: 155-157.
- HACHISUKA, M.
1931. The birds of the Philippine Islands, 1 (1): 1-168. London, Witherby.
1939. A new race of Bronze-winged Dove. *Bull. Brit. Ornith. Club*, 59: 45-47.
- HUMPHREY, P. S., AND K. C. PARKES
1959. An approach to the study of molts and plumages. *Auk*, 76: 1-31.
- MANUEL, C. G.
1936. A review of Philippine pigeons, IV. Subfamily Duculinae. *Philippine Jour. Sci.*, 60: 407-417.
- MAYR, E.
1944. The birds of Timor and Sumba. *Bull. Amer. Mus. Nat. Hist.*, 83: 123-194.
1962. [Review of] A synopsis of the birds of India and Pakistan, by S. D. Ripley. *Auk*, 79: 720.
- MCGREGOR, R. C.
1909. A manual of Philippine birds. Manila, Bureau of Science, 769 pp.
- MEINERTZHAGEN, R.
1923. A review of the genus *Oriolus*. *Ibis*, 1923: 52-96.
- OGILVIE-GRANT, W. R.
1896. On the birds of the Philippine Islands. Part VII. The highlands of Mindoro. *Ibis*, 1896: 457-477.
1897. On the birds of the Philippine Islands. Part IX. The islands of Samar and Leite. *Ibis*, 1897: 209-250.

PARKES, K. C.

1961. The Crested Lizard Hawk (*Aviceda jerdoni*) in the Philippines. *Postilla*, no. 51: 9 pp.

PETERS, J. L.

1937. Check-list of birds of the world, 3. Cambridge, Mass., Harvard University Press, 311 pp.

RABOR, D. S.

1938. Birds from Leyte. *Philippine Jour. Sci.*, 66: 15-34.

RAND, A. L.

- 1951a. Birds of Negros Island. *Fieldiana: Zoology*, 31: 571-596.
1951b. Review of the subspecies of the sunbird *Nectarinia jugularis*. *Fieldiana: Zoology*, 31: 597-607.

RAND, A. L., AND R. L. FLEMING

1957. Birds from Nepal. *Fieldiana: Zoology*, 41: 1-218.

RAND, A. L., AND D. S. RABOR

1959. Notes on some Philippine bulbuls. *Auk*, 76: 102-104.
1960. Birds of the Philippine Islands: Siquijor, Mount Malindang, Bohol, and Samar. *Fieldiana: Zoology*, 35: 221-441.

RIPLEY, S. D.

1961. A synopsis of the birds of India and Pakistan. *Bombay Natural History Society*, 703 pp.

RIPLEY, S. D. AND D. S. RABOR

1958. Notes on a collection of birds from Mindoro Island, Philippines. *Peabody Mus. Nat. Hist., Yale Univ., Bull.* 13: 83 pp.

SALOMONSEN, F.

1952. Systematic notes on some Philippine birds. *Vidensk. Meddel. Dansk naturh. Foren.*, 114: 341-364.

STRESEMANN, E.

1952. On the birds collected by Pierre Poivre in Canton, Manila, India and Madagascar (1751-1756). *Ibis*, 94: 499-523.

VAN BEMMEL, A. C. V.

1948. A faunal list of the birds of the Moluccan islands. *Treubia*, 19: 323-402.

VAURIE, C.

1953. A generic revision of flycatchers of the tribe Muscicapini. *Bull. Amer. Mus. Nat. Hist.*, 100: 453-538.